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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,664	08/16/2006	Akihiko Ikeya	0033-1092PUS1	9969

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EXAMINER	
PARVINI, PEGAH	

ART UNIT	PAPER NUMBER
1793	

NOTIFICATION DATE	DELIVERY MODE
02/10/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/589,664	IKEYA ET AL.	
	Examiner	Art Unit	
	PEGAH PARVINI	1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on __.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *8/6/08, 8/16/06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,270,563 to Herget et al. in view of U.S. Patent No. 5,830,446 to Berthiaume et al.

Regarding claims 1 and 4-5, Herget et al. teach a pigment composition comprising platelet-shaped metal oxide such as aluminum oxide, iron oxide, zinc oxide, etc. and nitrocellulose wherein the nitrocellulose has a nitrogen content of 10.9-12.3% and said composition is used in printing inks, coating systems (such as paints), etc. (column 1, lines 7-12; column 2, lines 45-60; columns 3-4; column 6, lines 1-40). Herget et al., further, disclose that the platelet-shaped pigment may be coated with one or more metal oxide layers (column 3, lines 20-22).

Although Herget et al. do not expressly disclose the degree of polymerization (i.e. DP) of said nitrocellulose, the polymerization degree of nitrocellulose would have been obvious to one of ordinary skill in the art through routine experimentation in order to optimize the viscosity as Berthiaume et al., drawn to compositions comprising coloring

components or pigments and nitrocellulose, teach that the degree of nitration and the degree of polymerization of the cellulose nitrate governs the viscosity of the nitrocellulose (Berthiaume et al. column 3, lines 27-55). It is noted that Herget et al. disclose that their composition has good compatibility with other components of aqueous or organic coating systems (Herget et al., column 4, lines 45-58).

With reference to "A UV metallic ink" or "A UV metallic coating", it is noted that while Herget et al. teach the use of said pigment composition in printing inks and coating systems, this is found to read broadly on the limitation of the claimed metallic pigment composition absence clear evidence showing the contrary, and further, considering that UV metallic coating or UV metallic ink is within the broad group of coating or printing inks which are disclosed by Herget et al.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herget et al. in view of Berthiaume et al. as applied to claim 1 above, and further in view of U.S. Patent No. 5,011,533 to Kuwajima et al.

Regarding claim 2, Herget et al. in view of Berthiaume et al. teach a composition comprising platelet-shaped metal oxide (which may be coated as disclosed in Herget et al., column 5, lines 20-22) and nitrocellulose having overlapping ranges of nitrogen content with the one instantly claimed; further, the degree of polymerization is obvious as detailed out above.

The references as combined, although disclosing coating the platelet-shaped metal oxide, are silent to a coating of phosphorus compound.

Kuwajima et al., drawn to metallic pigment composition, disclose that said composition comprises metal flakes, which is stably dispersed in the composition because it's being contacted and treated with phosphorus compound (Abstract; column 2, lines 32-36, 38-41, 48-53, and 57-61; column 3, lines 13-22). Thus, it would have been known to one of ordinary skill in the art to modify the combination of Herget et al. in view of Berthiaume et al. in order to apply a coating of a phosphorus compound onto flakes of metallic pigment as that taught by Kuwajima et al. motivated by the fact that the application and treatment of metallic pigment with phosphorus compound makes the metallic pigment to be stably dispersed in the pigment composition.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Herget et al. in view of Berthiaume et al. as applied to claim 1 above, and further in view of U.S. Patent No. 3,878,139 to Takahashi et al. and U.S. Patent Application Publication No. 2004/0024078 to Itoh et al.

Regarding claim 3, Herget et al. in view of Berthiaume et al. teach a composition comprising platelet-shaped metal oxide (which may be coated as disclosed in Herget et al., column 5, lines 20-22) and nitrocellulose having overlapping ranges of nitrogen

content with the one instantly claimed; further, the degree of polymerization is obvious as detailed out above.

The references as combined do not expressly disclose dissolving nitrocellulose in 2-hydroxy-3-phenoxypropyl acrylate. Nevertheless, it would have been obvious to one ordinary skill in the art to modify the combination of the references as set forth above in order to include 2-hydroxy-3-phenoxypropyl acrylate as a suitable diluent for dissolving nitrocellulose motivated by the fact that Takahashi et al., drawn to coating compositions, disclose that their coating composition comprises a component resulting from the reaction of a mercapto group-containing cellulose derivative such as nitrocellulose with one or more polymerizable monomers such as 2-hydroxyethyl acrylate (Abstract; column 13, lines 25-50). It is noted that although Takahashi et al. may not expressly and specifically disclose 2-hydroxy-3-phenoxypropyl acrylate, however, this compound would been an obvious variant to 2-hydroxyethyl acrylate as both are functionally equivalent as that disclosed by Itoh et al.; Itoh et al. disclose them to be reactive diluent in ink compositions (Abstract; [0043]). The combination of Takahashi et al. in view of Itoh et al. is, thus, to read on the limitation of claim 3 absent clear and specific evidence showing the contrary. It is to be noted that the substitution of one functionally equivalent material for another that is to be used for the same purpose (i.e. diluent) is well within the scope of the skilled artisan absent clear evidence otherwise.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PEGAH PARVINI whose telephone number is (571)272-2639. The examiner can normally be reached on Monday to Friday 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Pegah Parvini/
Examiner, Art Unit 1793

/Michael A Marcheschi/
Primary Examiner, Art Unit 1793